

UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION

BLUE SPIKE, LLC,

*Plaintiff,*

v.

TEXAS INSTRUMENTS, INC., et  
al.,

*Defendants.*

§  
§  
§  
§  
§  
§  
§  
§

CASE NO. 6:12-cv-499 MHS

LEAD CASE

Jury Trial Demanded

---

**BLUE SPIKE, LLC'S OPENING CLAIM CONSTRUCTION BRIEF**

## TABLE OF CONTENTS

<b>I. INTRODUCTION .....</b>	<b>4</b>
A. PATENTS-IN-SUIT .....	4
B. PRIOR ART.....	4
C. IMPROVEMENTS ON THE PRIOR ART .....	4
D. DEFENDANTS' INADEQUATE CONSTRUCTION .....	5
<b>II. APPLICABLE CLAIM CONSTRUCTION STANDARDS .....</b>	<b>6</b>
<b>III. LEVEL OF ORDINARY SKILL IN THE ART.....</b>	<b>7</b>
<b>IV. ARGUMENT.....</b>	<b>7</b>
1. <i>"Abstract"</i> .....	7
A. DEFENDANTS' CONSTRUCTION (EXCEPT FOR MORPHO DEFENDANTS).....	8
B. MORPHO DEFENDANTS' CONSTRUCTION.....	11
1. <i>"Digital"</i> .....	12
2. <i>"Match/Matches/Matching"; "Related to"; "A compare result"</i> .....	12
3. <i>"A comparing device" that compares"; "A device configured to determine if a query signal matches any one plurality of reference signals."</i> .....	15
4. <i>"Versions of [a/the/said/"that one of said plurality of"] reference signals"</i> .....	18
5. <i>"Selectable Criteria"</i> .....	19
6. <i>"Reference Signal" and "Query Signal"</i> .....	20
7. <i>"Reference Database"</i> .....	21
8. <i>"Creating at least one counter corresponding to one of said at least one reference signal"; "First digital reference signal abstract match recorder"; "Incrementing the counter... when a match is found"</i> .....	22
9. <i>"Distributing at least one signal based on the comparison step"</i> .....	23
10. <i>"perceptual characteristics representative of parameters to differentiate between versions of the reference signal"; "signal characteristic parameters configured to differentiate between versions of said reference signal"; et al.</i> .....	23
11. <i>"recognizable characteristic"</i> .....	25
12. <i>"cryptographic protocol"</i> .....	25
13. <i>"hash"</i> .....	26
14. <i>"reduced in size"</i> .....	27
<b>CONCLUSION.....</b>	<b>28</b>
<b>CERTIFICATE OF SERVICE.....</b>	<b>30</b>

## TABLE OF AUTHORITIES

### CASES

<i>Alcatel United States Res., Inc. v. Microsoft Corp.</i> , 2008 U.S. Dist. LEXIS 49615, at *5 (E.D. Tex. Jun. 27, 2008).....	7
<i>Lennon Image Techs., LLC v. Macy's Inc.</i> , 2014 U.S. Dist. LEXIS 105224, at *6 (E.D. Tex. Aug. 1, 2014).....	6
<i>Light Transformation Techs. LLC v. Lighting Sci. Group Corp.</i> , 2014 U.S. Dist. LEXIS 94090, at *10 (E.D. Tex. July 10, 2014).....	6
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303, 1312 (Fed. Cir. 2005).....	6
<i>Thorner v. Sony Computer Entm't Am. LLC</i> , 669 F.3d 1362, at 1366-1367 (Fed. Cir. 2012) .....	12

## I. INTRODUCTION

### A. Patents-in-Suit

There are four patents at issue in this lawsuit: U.S. Patent Nos. 7,346,472 (the '472 Patent), 7,660,700 (the '700 Patent), 7,949,494 (the '494 Patent), and 8,214,175 (the '175 Patent, and together with the '472, '700, and '494 Patents, the Patents-in-Suit). The patents are attached as Exhibits 1-4.

### B. Prior Art

At the time of the patents-in-suit, digital signal technology focused on digital archiving—creating the smallest possible representation of a digital signal in order to archive that signal for later retrieval. Digital archiving is concerned with finding exact matches—or 1-to-1 matches—because it aims to retrieve exactly what has been stored. As described in more detail later, Defendants have gone to great lengths to recast the patents-in-suit as teaching nothing beyond the prior art.

### C. Improvements on the Prior Art

The patents-in-suit improve upon the prior art in a variety of ways. Digital abstracts, as taught in the patents-in-suit, detail techniques for comparing and distinguishing digital signals, not just matching them. While abstracts may be used to identify the presence or absence of a match, they may also indicate variations between signals, identify various versions of a signal, and even detail how signals may be related. Whereas the prior art describes matching identical songs, abstracts identify different versions of a song, say a

song as performed by different artists. And whereas the prior art describes how two identical pictures may match, abstracts teach how abstracts can indicate that an artist's sketch of a photograph is related to the photograph itself. Biometric fingerprinting technology relies on abstracts, since environmental factors require biometric fingerprints to be compared and scored based on their similarity, not an unattainable identical match.

#### **D. Defendants' Inadequate Construction**

Much or all of Defendants' claim construction efforts focus on undermining the improvements introduced in the patents-in-suit. Defendants consistently suggest definitions that are not supported in either the intrinsic or extrinsic evidence. Instead, Defendants proffer definitions that would redefine the patents-in-suit as synonymous with prior art. If Defendants have their way, the rich comparing and distinguishing features taught in the patents-in-suit would be replaced with the 1-to-1 matching present in the prior art. For example,

- Defendants would replace the claim term "differentiate" with "distinguish." "Differentiate" indicates an ability to recognize differences, while "distinguish" merely indicates a 1-to-1 match.
- Defendants would replace "match" with "an indistinguishable copy." This construction would nullify claims and embodiments that indicate, for example, that versions may "match" an original signal.

- Defendants would replace “related to” with “an indistinguishable match.” By definition, something that is related is not identical.
- Defendants’ construction of “database” would require a pre-defined set, a characteristic of digital archiving.

Defendants’ definitions are not attempts to provide clarity, but rather to modify the patents-in-suit beyond recognition. Blue Spike urges the Court to refrain from adopting Defendants’ constructions and instead rely on the detailed intrinsic record.

## **II. APPLICABLE CLAIM CONSTRUCTION STANDARDS**

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Lennon Image Techs., LLC v. Macy’s Inc.*, 2014 U.S. Dist. LEXIS 105224, at \*6 (E.D. Tex. Aug. 1, 2014); *Light Transformation Techs. LLC v. Lighting Sci. Group Corp.*, 2014 U.S. Dist. LEXIS 94090, at \*10 (E.D. Tex. July 10, 2014) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)). The specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Light Transformation Techs. LLC* at \*11. The prosecution history also supplies intrinsic evidence if it is in evidence. *Lennon Image Tech., LLC* at \*7. “Differences among the claim terms can also assist in understanding a term’s meaning . . . . For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent

claim does not include the limitation.” *Alcatel United States Res., Inc. v. Microsoft Corp.*, 2008 U.S. Dist. LEXIS 49615, at \*5 (E.D. Tex. Jun. 27, 2008).

“Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent.” *Id.* at \*7. Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

### **III. LEVEL OF ORDINARY SKILL IN THE ART**

Blue Spike proposes that a person of ordinary skill in the art would have a Master’s degree in computer science or computer engineering, or equivalent experience, as well as two years experience in the field of digital fingerprinting and cryptography.

### **IV. ARGUMENT**

#### *1. “Abstract”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction (except Morpho Defendants)</b>
No construction required.	A data-reduced representation of a reference or query signal that is the smallest amount of data that can represent and differentiate two signals for a given predefined signal set and that retains a perceptual relationship with the original signal.
	<b>Morpho Defendants</b>

	<p>Indefinite<sup>1</sup></p> <p>To the extent the Court finds this term is definite, Morpho proposes: “a reduction that preserves an aesthetic quality of the original signal”</p>
--	---

The term “abstract” is a central component to each of the patents-in-suit, and as such the inventors went to great lengths to describe it thoroughly in the claim language and specifications. A separate construction is unnecessary because the term is sufficiently described in the intrinsic record. Moreover, both independent and dependent claims alter the definition of this term, making a single definition impossible to achieve. Blue Spike urges the Court to let the patent speak for itself and refrain from construing “abstract.”

#### **A. Defendants’ Construction (except for Morpho Defendants)**

Defendants’ suggested construction does not clarify “abstract”; it obfuscates the term. Defendants’ construction is inappropriate at least because it (1) unjustifiably redefines the term to resemble prior art, (2) narrows the term unnecessarily, and (3) is not consistent with all claims. The inadequacies of Defendants’ proposed construction are apparent when the phrase is broken down to its component parts.

- “***data-reduced representation***” – Only the asserted claims in the ’175 patent specifically mention that abstracts are “data reduced.” Defining

---

<sup>1</sup> Any indefinite arguments will be discussed in detail in Blue Spike’s Opposition to Defendants’ Motion for Summary Judgment based on indefiniteness. Blue Spike reserves its arguments regarding indefinite terms for that brief.

“abstract” in part as “data reduced” would make the term redundant in the ’175 claims. An abstract represents various aspects of an underlying signal, but is not necessarily “data-reduced” or smaller. In fact, because the process of comparing abstracts may indicate a variety of results—such as the degree of relatedness between two signals, whether they are versions of another signal, how they are similar or dissimilar, etc.—the abstract may conceivably be even larger than the signal from which it is derived. Thus, this phrase is improper.

- “***smallest amount of data***” – This phrase represents one of many attempts by Defendants to equate the patents-in-suit to prior art. While prior art dealt with archiving schemes intent on reducing signals to their smallest representative size, the patents-in-suit instead focus on comparing and distinguishing signals. The “smallest amount of data” phrase is not present in the intrinsic record and inappropriate in this context. Even the ’175 merely indicates that its incarnation of “abstract” is merely *reduced* in size, not the reduced to its *smallest possible* size. In fact, the specification indicates that creating a signal representation of the smallest size possible is not practiced in the current invention, as such a representation tends to lose a perceptual relationship common to the abstracts taught in the patents-in-suit.<sup>2</sup>

---

<sup>2</sup> See '175 smaller in size: col. 13, l. 55 - col. 14, l. 2. “The present invention creates a second database from the first database, wherein each of the stored audio signals in the first database is data reduced in a manner that is not likely to reflect the human perceptual quality of the signal, meaning that a significantly data-reduced signal is not likely to be played back and

- “*predefined signal set*” – This is another gratuitous constraint that Defendants have added to resemble prior art. Predefined sets are reminiscent of digital archives in which all the members of a database are known. Abstracts involve more than predefined sets of signals. For instance, they include the ability to add new members to the set and compare signals on the fly (*See Patent ’472, claims 3, 11*); they can indicate similarity to a member of the set and an exact match of a non-member; they handle null-sets which are by definition not present in the set; and they handle collisions. The abstract’s ability to compare beyond a predefined signal set is one of its improvements on prior art.
- “*retains a perceptual relationship*” – This claim is unnecessarily limiting. The inventors specifically reserved this definition for certain dependent claims. *See, e.g., Patent ’494, Claim 18* (further defining the term “abstract” as comprising “at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic, or combinations thereof.”) Forcing this phrase on all definitions of “abstract” would undermine the inventors’ intentions.

---

recognized as the original signal. As a result of the data reduction, the size of the second database (as measured in digital terms) is much smaller than the size of the first database, and is determined by the rate of compression. If, for example, if 24 hours worth of audio signals are compressed at a 10,000:1 compression rate, the reduced data could occupy a little more than 1 megabyte of data. With such a large compression rate, the data to be compared and/or analyzed may become computationally small such that computational speed and efficiency are significantly improved.”

Each restriction Defendants' attempt to place on the term "abstract" conflicts with the intrinsic record and is unnecessarily limiting.

### **B. Morpho Defendants' Construction**

The Morpho Defendants argue that the term "abstract" is "a reduction that preserves an aesthetic quality of the original signal."<sup>3</sup> This construction is woefully inadequate. Taken as a whole, the definition does not even account for the abstract's purpose—to compare and differentiate between signals. It is also clear that the proposed construction is inadequate when broken into parts.

- "***reduction***" – This term is inappropriate for the same reasons as "data-reduced" as detailed above—it is conceivable that an abstract may be larger than its representative signal. Only the '175 patent specifically limits the abstract as being "smaller in size."
- "***aesthetic***" – This is an inadequate attempt to summarize the various qualities an abstract may exhibit. First, nowhere does the claim language indicate "aesthetic." Second, "aesthetic" cannot be construed as to incorporate all of the terms present in claims, such as perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic (*See, e.g.*, Patent '494, Claim 18); in fact, "aesthetic" itself would likely require construction.

The Morpho Defendants' suggested construction is unduly limiting.

---

<sup>3</sup> As noted in footnote 1, the Morpho Defendants' indefiniteness claim will be dealt with on summary judgment.

As indicated, neither the Morpho Defendants nor the remaining Defendants offer constructions that clarify the term “abstract.” On the contrary, Defendants offer constructions that alter the definition of a term that is clearly defined in the intrinsic record. Because the claims and specifications of the patents-in-suit clearly define “abstract,” Blue Spike urges the Court to refrain from construing it.

1. *“Digital”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
A series of binary digits—1’s and 0’s.	Plain and ordinary meaning.

Blue Spike’s construction of “digital” as “a series of binary digits—1’s and 0’s” is an adequate construction. Moreover, it is the inventor’s prerogative to define his or her terms. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, at 1366-1367 (Fed. Cir. 2012) (“[W]e do not redefine words. Only the patentee can do that.”) Here, the inventors specifically indicated that “digital” refers to “a series of binary digits—1’s and 0’s.” ’700 patent, Col4: 25-33. Defendants’ desire to leave the definition up to “plain and ordinary meaning” introduces the possibility of conflicting definitions and strips the inventors of their right to define their own terms. Blue Spike asks the Court to adopt the definition indicated in the intrinsic evidence.

2. *“Match/Matches/Matching”; “Related to”; “A compare result”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
----------------------------------	---------------------------------

<b>Match / Matches / Matching</b>	
No construction required.	A Match – “an indistinguishable copy” Matches – “is indistinguishable from” Matched – “was indistinguishable from” Matching – “indistinguishable”
<b>Related to</b>	
No construction required.	“A Match”
<b>A compare result</b>	
No construction required.	“data that indicates whether a Match between two abstracts was found”

The abstracts described in the patents-in-suit are capable of rich and complex matching. Abstracts may indicate the presence or absence of an identical match. They may match a version of a signal to an original signal. They may even match similar signals and indicated how and to what degree those signals are related. Because the intrinsic record plainly details the matching process, no construction is required.

Defendants’ proposed construction is another attempt to redefine the patents-in-suit as similar to prior art. Defendants’ construction of “match” as an “indistinguishable copy” does not capture the capabilities described in the claims and specifications, but instead the 1-to-1 matching widely taught in the prior art. This 1-to-1 match does not account for “versions,” “index of relatedness,” “similarity,” etc. As detailed in the specification, an abstract match might occur when a variation of a song is matched to the original song, or when a sketch artists drawing is matched to an original photo. These are

certainly not 1-to-1 matches, rather 1-to-many. “Match” is adequately defined in the intrinsic record and should not be further construed.

Defendants also propose that “related to” should be defined as an “indistinguishable copy” or 1-to-1 match. This only strengthens Blue Spike’s proposal, as “related to” by definition implies similarity, not equality. For example, the specification indicates that an abstract of the sun could be created by identifying essential characteristics of the sun (i.e. those “characteristics *related to* it). Patent ’472, Column 15:2-8. Those characteristics are not the sun itself, but they share a connection with it. Other images would then be matched based on those related characteristics. This technique is far from the 1-to-1 matching taught in the prior art and proposed in Defendants’ definition.

Defendants’ rendering of “compare result” is similarly flawed. Abstracts, as defined in the patents-in-suit, are designed to produce more than a 1-to-1 match, thus the result of a comparison could produce any number of important data points, such as range of similarity, whether the abstract is a version of the reference signal, etc. Defendants’ construction undermines the intention of the patents-in-suit to improve upon the 1-to-1 matching limitation.

3. “A comparing device” that compares”<sup>4</sup>; “A device configured to determine if a query signal matches any one plurality of reference signals.”<sup>5</sup>

Blue Spike’s Construction	Defendants’ Construction
Not governed by §112 ¶6	Means plus function.

### A. Legal Framework

Use of the word “means” in a claim limitation will invoke a rebuttable presumption that § 112 ¶ 6 applies. By contrast, a claim term that does not use “means” will trigger the rebuttable presumption that § 112 ¶ 6 does not apply. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002) (citations omitted).

The presumption that a limitation lacking the term “means” is not subject to section 112 ¶ 6 can be overcome if it is demonstrated that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function. But, where “[t]he record shows that an ordinary artisan would have recognized the [claim term] as an electronic device with a known structure”, there is sufficient disclosure.

*Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1376 (Fed. Cir. 2010)

---

<sup>4</sup> ‘472 patent, claim 11; ‘494 patent, claims 1 and 11.

<sup>5</sup> ‘494 claim 29.

(holding that the claim term “controller” was known in the art and that the means-plus-function presumption was not triggered).<sup>6</sup>

### **1. Support for Plaintiff Blue Spike’s Proposed Construction**

Evidence that the claim terms “a comparing device that compares” and “a device configured to determine if a query signal matches any one plurality of reference signals” are not implicated by the means-plus-function statute finds more than adequate support in the shared specification:

The fourth element is the comparing device[,] which is able to compare the selected object using the features selected by the feature selector to the plurality of signals in the reference database to identify which of the signals matches the monitored signal. Depending upon how the information of the plurality of signals is stored in the reference database and depending upon the available computational capacity (e.g., speed and efficiency), the exact nature of the comparison will vary. For example, the comparing device may compare the selected object directly to the signal information stored in the database. Alternatively, the comparing device may need to process the signal information stored in the database using input from the feature selector and then compare the selected object to the processed signal information. Alternatively, the comparing device may need to process the selected object using input from the feature selector and then compare the processed selected object to the signal information. Alternatively, the comparing device may need to

---

<sup>6</sup> To the extent Defendant raises indefiniteness in the alternative, Plaintiff Blue Spike will respond according to well-established precedent in any subsequent summary judgment motions practice. The “[indefiniteness] standard is met where an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area.” *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249–50 (Fed. Cir. 2008). “In determining whether that standard is met, i.e., whether the claims at issue are sufficiently precise to permit a potential competitor to determine whether or not he is infringing, we have not held that a claim is indefinite merely because it poses a difficult issue of claim construction.” *Exxon Research & Eng’g Co. v. U.S.*, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (citations omitted).

process the signal information stored in the database using input from the feature selector, process the selected object using input from the feature selector, and then compare the processed selected object to the processed signal information.

'472 patent, col. 8, l. 55 – col. 9, l. 10.

That these claim terms would have been well understood by one of skill in the art is further supported by multiple technical dictionary definitions:

- “Comparator: A device that compares two quantities and determines their equality.” THE COMPUTER GLOSSARY 72 (8th ed. 1998)
- Comparator: 1. A piece of hardware or software that checks the outputs of a system while that system is operational. For a single channel system (i.e. no redundancy or diversity), the comparator might check against several outputs to see that only valid combinations are produced. The comparator may deal only with binary signals, usually termed *voting logic*, or may compare analog signals.
- 2. A piece of software that, for example, compares the contents of two text files and highlights any differences between the contents. It is often used in \*word processing or editing of program source files and as a \*software quality assurance tool in \*configuration management.” OXFORD DICTIONARY OF COMPUTING (4th ed. 1996) (emphasis in original)
  - “comparator: (1) a circuit for performing amplitude selection between either two variables or a variable and a constant. (2) (test measurement, and diagnostic equipment) A device capable of comparing a measured value with predetermined limits to determine

if the value is within these limits. (3) (analog computer) A circuit, having only two logic output states, for comparing the relative amplitudes of two analog variables, or of a variable and a constant, such that the logic signal output of the comparator uniquely determines which is the larger at all times. (4) (software) A software tool that compares two computer programs, files, or sets of data to identify commonalities or differences. Typical objects of comparison are similar versions of source code, object code, data base files, or test results. IEEE AUTHORITATIVE DICTIONARY OF STANDARD TERMS (2000)

Accordingly, the intrinsic record and relevant dictionary references support Plaintiff Blue Spike's proposed claim construction and § 112 ¶ 6 does not here apply.

4. *"Versions of [a/the/said/]"that one of said plurality of" reference signals"*

Blue Spike's Construction	Defendants' Construction
No construction required.	"multiple variations of a particular reference signal"

These terms are best left defined by the claims and specifications. For example, the intrinsic record notes that "version" may be a reference signal that is transformed during transport, such as a song transformed once played by CD, AM radio, or over the internet. See '175, Column 13. A "version" of a

reference signal may also refer to different formatting and/or compression schemes applied to the same song.

Alternatively, “versions” may relate to a reference signal, such as a song, but not be derived from the signal itself per se. An example might include separate artists singing the same song. The reference signal in this case is the original song, and each “version” is a separate rendering by a separate artist. See ’175, Column 8. Another example might be a sketch artist’s rendering of photograph.

Defendant’s construction is unnecessary and will likely confuse these terms. To the extent that Defendant’s construction implies that the versions are derived directly from a reference signal (such as a song transported across different mediums) rather than indirectly (such as different artists producing the same song), it is incorrect. At best Defendants’ construction is distracting. At worst, it is incorrect. Blue Spike urges the Court to let the patents-in-suit speak for themselves and refrain from construing this term.

##### 5. *“Selectable Criteria”*

Blue Spike’s Construction	Defendants’ Construction
“Criteria that is selectable.”	“Rules available for selection, which create different abstracts for a particular reference signal.”

The term “selectable criteria” can be succinctly construed as “criteria that is selectable.” This definition allows for criteria that may affect the

abstract, or may not. The criteria may be complex rules or simple variables.

Whatever the case, the criteria may be selected by the user.

Defendants place unnecessary limitations on this simple term. There is no indication in the record that the criteria must be rules rather than variable, or that the criteria must necessarily generate different abstracts. This unnecessarily limits criteria that may only alter the abstract when used in combination with other specific criteria, criteria that only alter certain types of signals, etc. Defendants' construction does not take into account these or other acceptable nuances, and is therefore inadequate. Blue Spike asks the Court to adopt its simple construction of "criteria that is selectable" to avoid confusion.

#### *6. "Reference Signal" and "Query Signal"*

<b>Blue Spike's Construction</b>	<b>Defendants' Construction</b>
<b>Reference Signal</b>	
"A signal that is being referenced."	"An uncompressed signal representing an entire work."
<b>Query Signal</b>	
"A signal being monitored or analyzed."	"An uncompressed signal representing an entire work."

The term "reference signal" is self-explanatory. It is a signal that is being referenced. Similarly, a "query signal" in the language of the patents-in-suit is "a signal being monitored or analyzed." These constructions succinctly clarify the terms without limiting them.

Defendants again inject unnecessary limitations. It is true that the signal *may* be uncompressed, but not necessary. For instance, a compressed music file (e.g. an MP3) may be the reference signal that is then compared against reference signals of the MP3s as they are transmitted across different mediums. Or a compressed visual work (e.g. a JPEG) may be the reference signal to be compared against other compressed works (e.g. PNGs, GIFs) or sketch artists renderings. Indeed, Defendants' interpretation would limit the patents-in-suit to uncompressed, raw images only, and nullify many of the embodiments.

Similarly, Defendants' limitation of "representing an entire work" is too limiting. There is no reason why a reference signal could not be a notable portion of a public speech, a key subset of a painting, or the chorus of a song.

Blue Spike asks the Court to accept its definition in order to not unnecessarily limit this term.

#### 7. *"Reference Database"*

<b>Blue Spike's Construction</b>	<b>Defendants' Construction</b>
"a database that contains references"	"A database containing Abstracts for a predefined set of Reference Signals."

A "reference database" is merely "a database containing abstracts of reference signals." Defendants again attempt to needlessly inject "a predefined set" into the definition. This "predefined set" limitation is representative of the prior art, not the patents-in-suit. As noted above, predefined sets were

common to digital archives in which all the members of a database are known. Abstracts involve more than predefined sets of signals, such as abstracts compared on the fly, non-member matching, null-sets, and collisions. The plaintiffs-in-suit overcome the “predefined set” limitation of the prior art. Blue Spike asks the Court to adopt its definition as more adequately defining the term.

8. *“Creating at least one counter corresponding to one of said at least one reference signal”; “First digital reference signal abstract match recorder”; “Incrementing the counter . . . when a match is found”*

Blue Spike’s Construction	Defendants’ Construction
<b>Creating at least one counter corresponding to one of said at least one reference signal.</b>	
No construction required.	“Creating an element used for counting, which corresponds to a particular Reference Signal.”
<b>First digital reference signal abstract match recorder.</b>	
No construction required.	“an element used for counting, which corresponds to a particular Abstract.”
<b>Incrementing the counter . . . when a match is found.</b>	
No construction required.	“increasing the value of the element used for counting when a Match is found”

This term does not require construction. Defendants’ add the idea that “an element” is created and “used for counting.” This is beyond the scope and purpose of the claim. How the counter is created is not important, nor is it

indicated in the specification. Defendants' attempt to narrow this claim is unjustified.

*9. "Distributing at least one signal based on the comparison step"*

Blue Spike's Construction	Defendants' Construction
No construction required.	"delivering at least one signal resulting from the comparison to multiple recipients"

This is another term that is self-explanatory. Defendants' construction adds no clarity. Nor is there an indication that "distribution" should be limited to delivery to "multiple recipients." A 401(k) does not likely distribute to more than one person; it distributes to the owner. Here, a signal is distributed to one or more recipients.

*10. "perceptual characteristics representative of parameters to differentiate between versions of the reference signal"; "signal characteristic parameters configured to differentiate between versions of said reference signal"; et al.*

Blue Spike's Construction	Defendants' Construction
<b>Perceptual characteristics representative of parameters to differentiate between versions of the reference signal.</b>	
No construction required.	"Perceptual characteristics, which represent parameters, that distinguish multiple Versions of the same Reference Signal"
<b>Signal characteristic parameters configured to differentiate between versions of said reference signal.</b>	
No construction required.	"parameters that characterize a signal that distinguish between multiple

	Versions of the same Reference Signal”
<b>Signal characteristic parameters configured to differentiate between a plurality of versions of the reference signal.</b>	
No construction required.	“parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal”
<b>Signal characteristic parameters configured to differentiate between other versions of that one said plurality of reference signals.</b>	
No construction required.	“parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal”
<b>Signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work.</b>	
No construction required.	“parameters that characterize a signal that distinguish between multiple Versions of a single visual work and multimedia work”

Blue Spike believes these phrases are self-explanatory. Apart from its use of the word “distinguish” rather than “differentiate,” Defendants’ constructions appear to be nothing more than a jumbling of the same language or meaning. But Defendants’ constructions must not be adopted because they once again attempt to strip the patents-in-suit of the 1-to-many capabilities that distinguish it from prior art. Defendants replace the claim term “differentiate” (meaning “to ascertain what makes something different”) with “distinguish” (meaning “to merely recognize that something is different”). The patents-in-suit do more than recognize that signals are different; they ascertain what makes them different. Blue Spike urges the court to leave this term as is.

*11. “recognizable characteristic”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
No construction required.	“characteristic visually or aurally perceived by a person”

This term requires no construction. That patents-in-suit place no limitation on whether the characteristic is recognizable by a human or machine, nor that it must actually be perceived rather than have the ability to be perceived.

Defendants’ construction is erroneous. The term “recognizable characteristic” appears in the claim language and is specifically distinguished from “perceptible characteristic” and “perceptual quality.” See claim 18 of the ’494 patent. If Defendants’ construction were accepted, it would make other claim items in the list redundant. Nor is the term limited to “visual” or “aural.” It is equally plausible that the term can be recognized by a machine. Defendants’ construction places unnecessary limitations on this term and should be abandoned.

*12. “cryptographic protocol”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
No construction required.	“an agreed upon procedure for transforming data in order to secure it”

Blue Spike believes that the term “cryptographic protocol” is understood by one familiar with the art. Defendants’ construction adds no clarification and needlessly complicates a self-evident term. Moreover, Defendants’ construction is incorrect. In the data signaling industry, cryptography does not intend secure a signal completely, but only in transit.

13. *“hash”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
“A mathematical function that maps a bit string.”	“A mathematical transform that maps a bit string of arbitrary length to a fixed length bit string to achieve uniqueness.”

Blue Spike proposes a definition of “hash” that is simple and adequate. Defendants’ construction is needlessly wordy and incorrect. In particular, the “to achieve uniqueness” limitation is erroneous. A hash does not necessarily achieve uniqueness, since different samples may produce identical samples (known in the art as “collisions”). This limitation is not found anywhere in the claim or specification, and is absent from the extrinsic evidence cited by Defendants. Blue Spike asks the Court to adopt its definition, or at the very least, to remove the phrase “to achieve uniqueness” from Defendants’ construction.

*14. “reduced in size”*

<b>Blue Spike’s Construction</b>	<b>Defendants’ Construction</b>
No construction required.	“compressed”

The term “reduced in size” should not be construed. First, the inventors intended not to use the term. The patents-in-suit refer to “compression” in certain dependent claims and throughout the specification. If the inventors had intended for “reduced in size” to mean “compression,” they would have used the term. Second, the term is too limiting. The term “compression” connotes the use of an algorithm, whereas “reduced in size” is not limited by this constraint. An example of a signal reduced in size but not compressed is a song that is reduced by a lower sampling rate. *See Patent ’175, Column 10:32-*

## CONCLUSION

Blue Spike's proposed constructions allow the detailed intrinsic record to speak for itself. Conversely, Defendants' proposed constructions are unnecessarily limiting and in large part designed to modify the patents-in-suit to resemble prior art. For these reasons, Blue Spike respectfully asks the Court to adopt its constructions.

Respectfully submitted,

/s/ Randall T. Garteiser  
Randall T. Garteiser  
Lead Attorney  
Texas Bar No. 24038912  
rgarteiser@ghiplaw.com  
Christopher A. Honea  
Texas Bar No. 24059967  
chonea@ghiplaw.com  
Christopher S. Johns  
Texas Bar No. 24044849  
cjohns@ghiplaw.com  
GARTEISER HONEA, P.C.  
218 North College Avenue  
Tyler, Texas 75702  
(903) 705-0828  
(903) 526-5477 fax

Kirk J. Anderson  
California Bar No. 289043  
Peter S. Brasher  
California Bar No. 283992

GARTEISER HONEA, P.C.  
44 North San Pedro Road  
San Rafael, California 94903  
(415) 785-3762  
(415) 785-3805 fax

*Counsel for Blue Spike, LLC*

**Certificate of Service**

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Federal Rule of Civil Procedure 5(d) and Local Rule CV-5(d) and (e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by email.

/s/ Randall Garteiser